This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A computerized method for producing code in an architecture description language, said method comprising the steps of:

a.   reading an opcode summary table;

b.   analyzing said opcode summary table to determine the layout of said opcode summary table ;

c.   generating code for an instruction in architecture description language format; and

d.   repeating said generating step for each line in said opcode summary table, resulting in an ADL representation of the opcode summary table such that the ADL representation generates a representation of structure.

2.   (Original) The method of claim 1 where the opcode summary table is provided in a spreadsheet.

3.   (Original) The method of claim 1 where the opcode summary table is provided in a comma separated value format.

4.   (Currently Amended) A computerized method for producing code in an architecture description language format, said method comprising the steps of:

a.   reading an opcode summary table;

b.   creating a plurality of output files;

c.   analyzing said opcode summary table to determine the layout of said opcode summary table;

d.   determining the beginning of a group from said opcode summary table;

e.   generating root code for the hierarchy in architecture description language format based on said grouping, wherein the root code in architecture description language generates a representation of structure;

f.   cycling through each group to generate detailed code in architecture language format;

g.   repeating said cycling step until the end of the opcode summary table is reached; and

h.   closing said plurality of output files.

5.   (Original) The method of claim 4 where the opcode summary table is provided in a spreadsheet.

6.   (Original) The method of claim 4 where the opcode summary table is provided in a comma separated value format.

7.   (Original) The method of claim 4 where the opcode summary tablet is pre-formatted such that the opcodes are separated into groups prior to be read.

8.   (Original) The method of claim 4 where said cycling step further comprises determining the presence of sub-groups within said group and generating detailed code for each sub-group within said group.

9.   (Currently Amended) A computer program comprising:

a first computer code section for reading an opcode summary table having a plurality of entries representative of a like plurality of microprocessor instructions;

a second computer code section for producing a grouping of at least two of said entries in accordance with a grouping criteria; and

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a third computer code section for generating an encoded representation of said grouping, wherein the encoded representation of said grouping includes an Architecture Description Language representation that generates a representation of structure.

10.   (Previously Presented) A computerized method for producing code in an architecture description language, said method comprising the steps of:

reading an opcode summary table;

analyzing said opcode summary table to determine the layout of said opcode summary table and constructing an opcode super group based on at least two opcode groups identified by said analyzing; and

generating code for an instruction in architecture description language format based on said opcode super group.

11.   (Currently Amended) A computerized method for producing code in an architecture description language format, said method comprising the steps of:

reading an opcode super group table;

creating a~plurality~ofat least one output files;

analyzing said opcode super group table to determine a layout of said opcode super group table;

determining a presence of a sub-group from said opcode super group table;

generating root code in architecture description language format based on the sub-group;

cycling to generate detailed code for the sub-group in architecture description language format;

repeating said cycling and determining until the end of the opcode super group table is reached; and

closing said at least one~plurality~of output files.

12.   (Currently Amended)   A computer program embodied in at least one computer readable medium comprising:

a first computer code section for reading an opcode summary table having a plurality of entries representative of a like plurality of microprocessor instructions;

a second computer code section for producing a first grouping of at least two of said entries in accordance with a grouping criteria;

a third computer code section for producing a second grouping of at least two of said entries in accordance with a grouping criteria;

a fourth computer code section for producing a super grouping of the first and second grouping; and

a fifth computer code section for generating an encoded representation of said super grouping.

13.   (New)   The method of claim 1, wherein the representation of structure comprises an ADL representation of a microprocessor.

14.   (New)   The method of claim 1, wherein the representation of structure comprises an ADL microprocessor representation utilizable by an assembler generator.

15.   (New)   The method of claim 1, wherein the representation of structure comprises an ADL microprocessor representation utilizable by a simulator generator.